

VERTEX

AERATION KITS

Vertex is our best-in-class sub-surface aerator. A single motor can aerate up to 5 surface acres. Combine motors for larger dams, i.e. 20+ acres.

HIGHLIGHTS

- Aerate any sized dam—0.5 to 20+ surface acres
- Power up to 10 air-stations
- Operates up to 12m deep
- Ideal for swimming dams—no power in the water
- Low power consuming compared to similar sized surface aerators



WATCH IT IN ACTION

CREATE A HEALTHY, "NATURAL" LOOKING DAM

Vertex aerators are sub-surface which means you can aerate your dam while maintaining a "natural" looking aesthetic (i.e. no fountain). The compressor sits on the shore and pumps air to stations placed on the floor of your dam. These air-stations release bubbles that rise up, dragging bottom-waters to the surface. Here, gas exchange occurs and oxygen enters the water.



SPECS

Vertex is a USA manufacturer based in Florida operating for over 40 years. The company is renowned for its world-class team of aquatic biologists, fisheries scientists and engineers who build world-class aquatic products.

MOTOR	AERATES *	VOLTS	POWER **	NOISE LEVELS †	MIN. DEPTH	MAX. DEPTH
1/3hp	1/2 to 2 acres	230	250-350W	58dB	1.5m	9m
1/2hp	1 to 4 acres	230	300-400W	61dB	1.5m	12m
3/4hp	2 to 5 acres	230	520-650W	65dB	1.5m	12m

Have over 5 acres?
Combine motors to
aerate any sized dam

For a more accurate
indication of surface
acreage aerated use
the chart below

Vertex sizing by depth chart					
		Motor size	1/3hp	1/2hp	3/4hp
Depth	1.5-2.5m	Surface area of dam water *	1/2 acre	1 acre	2 acres
	2.5-3.5m		1 acre	2 acres	3 acres
	3.5m+		2 acres	4 acres	5 acres

1 acre = 4,047m²

* Based on ideal dam shape and water conditions, actual results may differ

** Power usage will depend on factors influencing operating pressure, such as depth, hose length etc

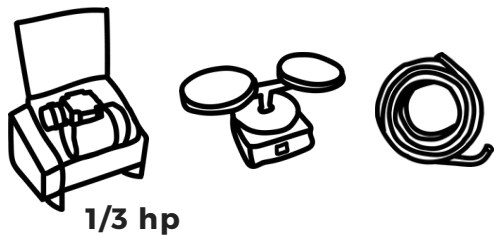
† Decibel readings for compressor units without sound kit

VERTEX KITS

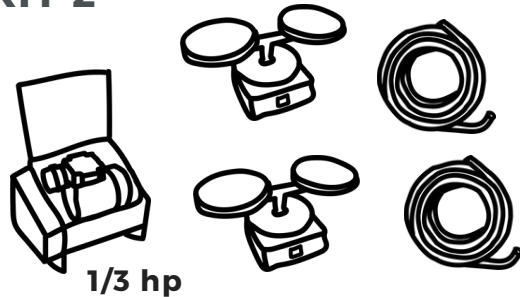
Below is an overview of the our Vertex kits. See next pages for a detailed list of items in each kit.



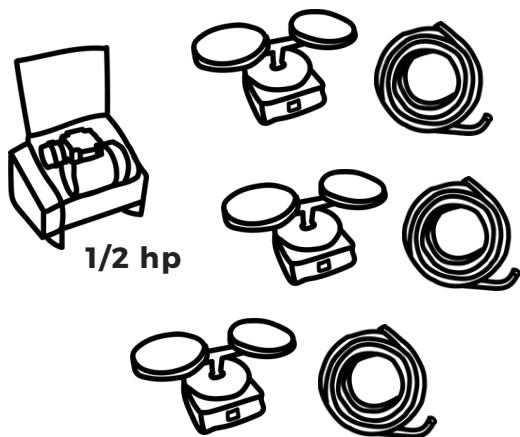
KIT 1



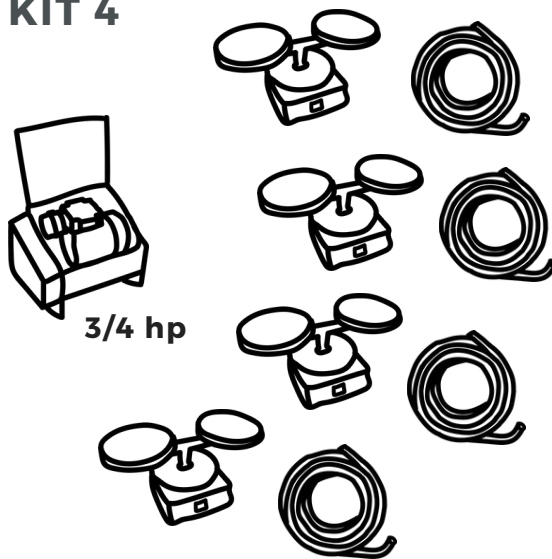
KIT 2



KIT 3



KIT 4

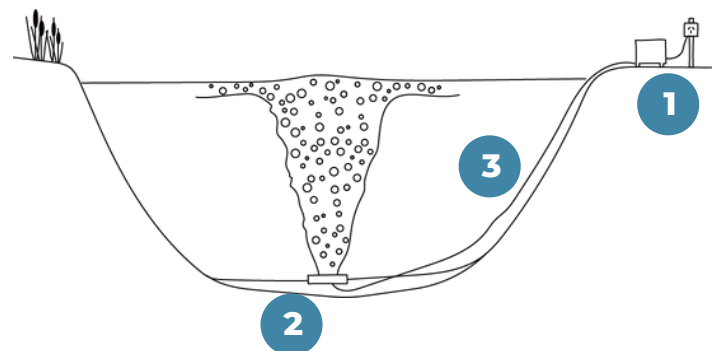


KIT 1

1/3 hp

Optional "sound reduction" kit available

- 1 1/3 hp Vertex compressor with cabinet, including electrics, fan and 2-valve assembly
- 2 1 x twin-disc Vertex air-station
- 3 1 x 30m roll weighted air hose 5/8"
2 x hose clamps
2 x replacement filter elements

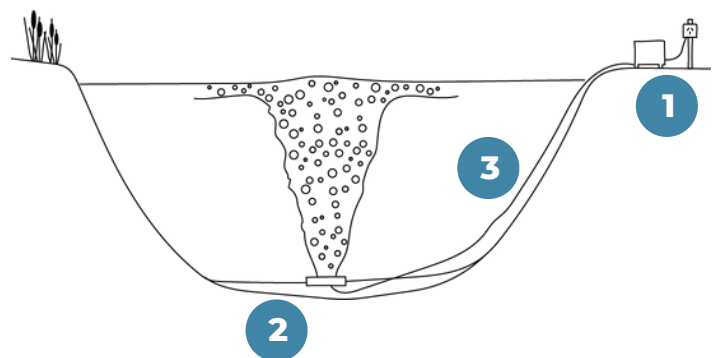


KIT 2

1/3 hp

Optional "sound reduction" kit available

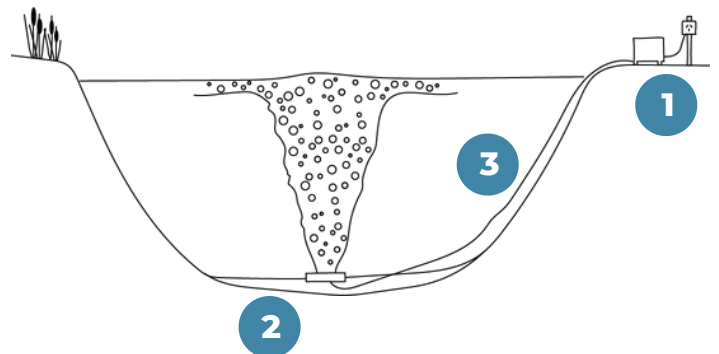
- 1 1/3 hp Vertex compressor with cabinet, including electrics, fan and 2-valve assembly
- 2 2 x twin-disc Vertex air-stations
- 3 2 x 30m rolls weighted air hose 5/8"
 - 4 x hose clamps
 - 2 x replacement filter elements



KIT 3

1/2 hp

- 1 ½ hp Vertex compressor with cabinet, including electrics, fan and 3-valve assembly (Optional "sound reduction" kit shown in image)
- 2 3 x twin-disc Vertex air-stations
- 3 3 x 30m rolls weighted air hose 5/8"
6 x hose clamps
2 x replacement filter elements

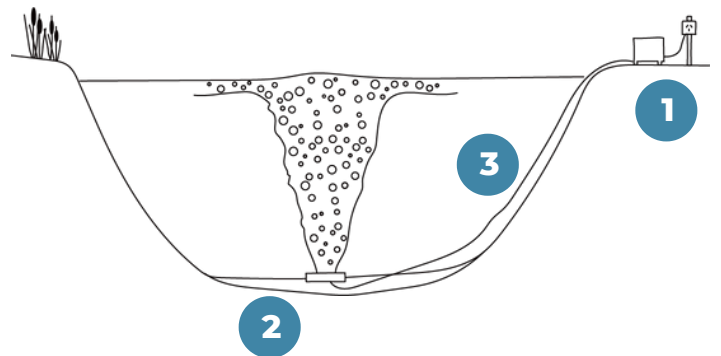


Optional "sound reduction" kit shown in image

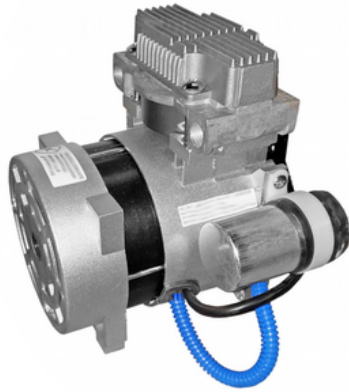
KIT 4

3/4 hp

- 1** 3/4 hp Vertex compressor with cabinet, including electrics, fan and 4-valve assembly (Optional "sound reduction" kit shown in image)
- 2** 4 x twin-disc Vertex air-stations
- 3** 4 x 30m rolls weighted air hose 5/8"
8 x hose clamps
2 x replacement filter elements



Optional "sound reduction" kit shown in image



COMPRESSOR

- Heavy-duty rocking piston motor
- Highest flow rate of any compressor in its class
- Oil-free, non-lube motor
- Built-in cooling system
- Pressure gauge for airflow adjustment
- 3 year warranty

CABINET

- Lifetime 'rust-free' warranty
- Weather-resistant design
- Durable and attractive powder-coated finish
- SafeStart technology allows full pressure restarts
- Integrated muffler for quieter operation
- Easy access design with lock and key
- Exterior on/off safety switch



AIR-STATIONS

- Large active-lifting surface
- Self-cleaning membrane discs
- Air column stabilisation technology to maximise lift velocity
- Flow control technology to equally distribute airflow to each air-station
- 5 year warranty

WEIGHTED HOSE

- Self-weighted to sit on dam floor
- Over-sized I.D. for high flow
- PVC composite for long-term durability
- Thick walls for protection against punctures
- 15 year warranty



FOR AN EVEN QUIETER MOTOR, ADD A "SOUND REDUCTION" KIT.

While all cabinets are built to be low-noise, Vertex has developed a "sound reduction" kit for those times when the compressor is placed close to buildings. This is common in remote setups (see next page) where the compressor is placed near your mains power supply and an air hose is run to the dam.

Do I really need a "sound reduction" kit?

Vertex compressors are not overly noisy without a "sound reduction" kit. They produce 50-54dB of sound which is about the same level as two people having a conversation. This obviously isn't a problem if the compressor is located a good distance from your house. However, the same way you don't want people talking just outside your bedroom window at night, you probably don't want a compressor without a "sound reduction" kit located too close to your home.



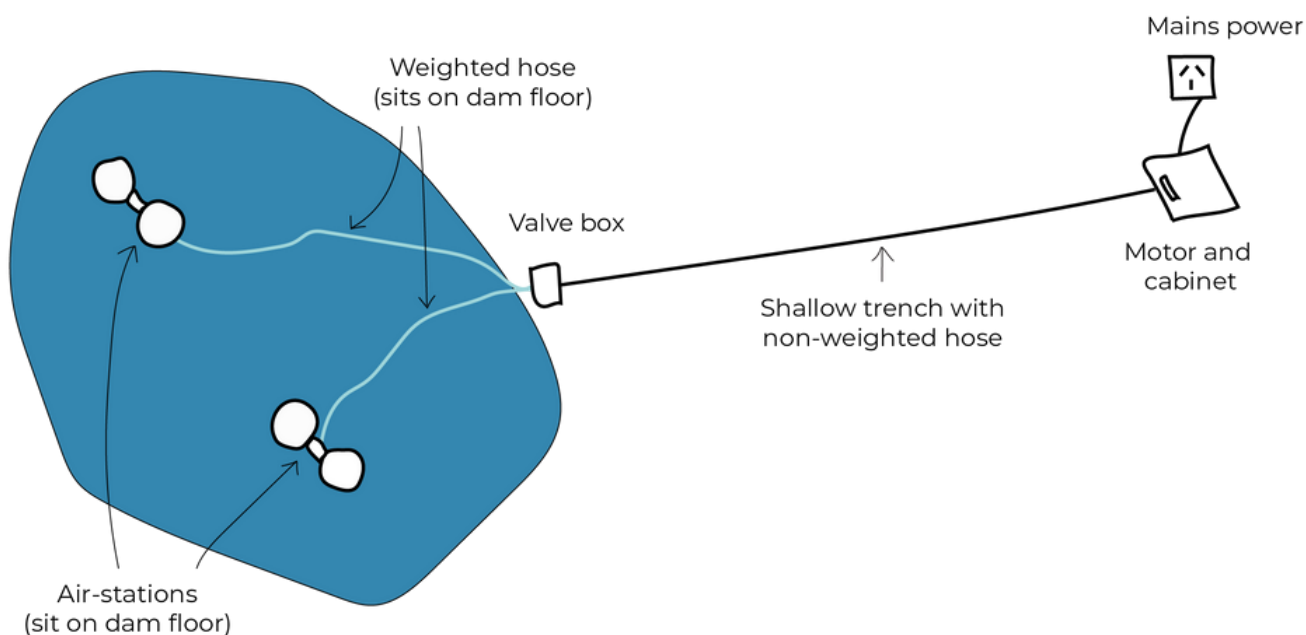
**Listen to Vertex compressor
with "sound reduction" kit**

The bigger the motor, the more we recommend a "sound reduction" kit. For instance, our medium compressor cabinets ($\frac{1}{2}$ hp and $\frac{3}{4}$ hp) can have their sound levels reduced by up to 7dB by adding a "sound reduction" kit. This may not sound like a lot but...

**For each 10dB drop, humans perceive
sound to drop by approximately half.**

REMOTE SETUP (200M) AVAILABLE

Remote setup is available where you can aerate a dam up to 200m from your nearest mains power. You simply place the compressor near your mains power and run a hose through a shallow trench to your dam shore where we have a valve box which disperses the air to the various air-stations. 100% solar options are also available.



Considering a remote setup?

We encourage you to look into a "sound reduction" kit (previous page) as they are specifically designed for these situations.

ALTERNATIVELY,



GO 100% SOLAR

Interested in going 100% solar? We offer SunTech PicoCells—USA-made solar inverters that can be used to power any Vertex compressor using solar panels.

The small, multifunctional device incorporates an inverter, VFD, MPPT controller, phase initiator and voltage booster.

Designed for remote off-grid installations, the aluminium chassis is IP65-rated for harsh outdoor environments and can operate in high temperatures, humidity and corrosive environments.

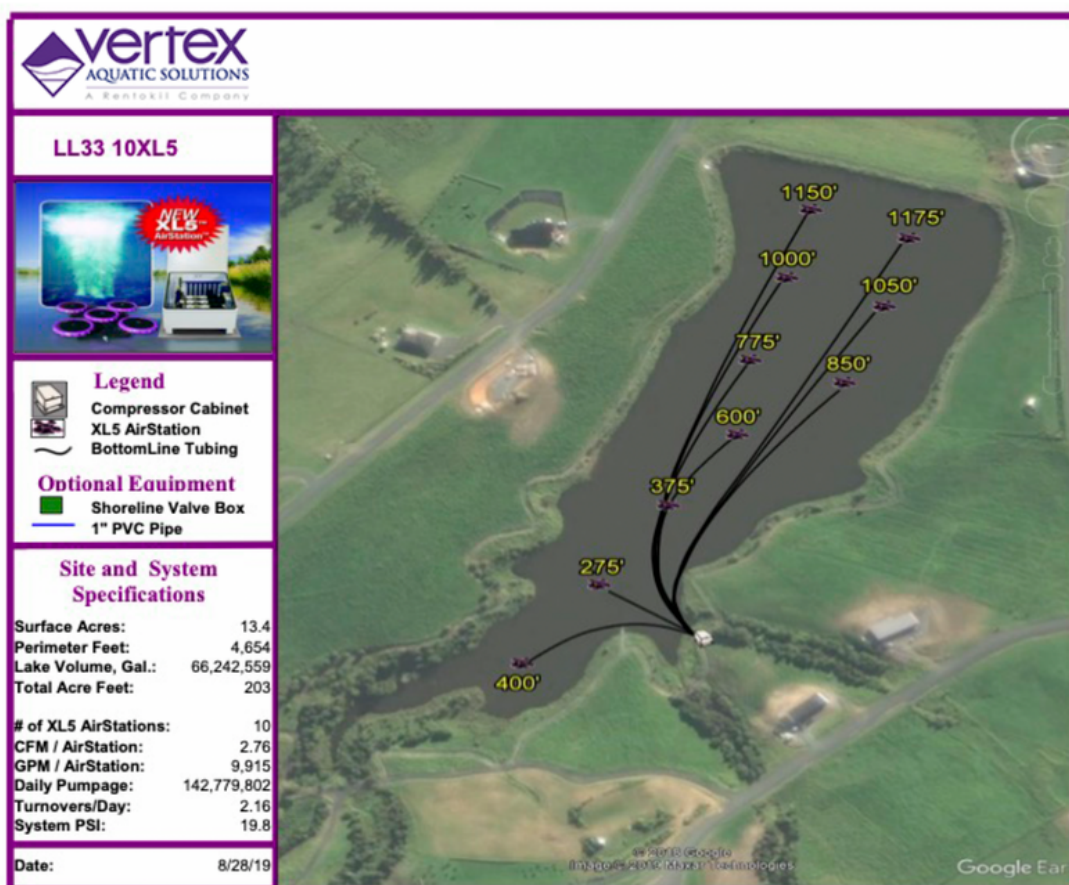


To learn more, check the 'I'm interested in solar power' option when requesting an [online quote](#).

FREE CUSTOM DESIGNS FOR LARGE DAMS.

To make it easier to aerate larger dams, Vertex offers free custom designs for large-scale setups. Design suggestions are produced by running your dam's specs through proprietary-design software, which compares your waterbody to thousands of others.

Designs include recommendations on the pump size and its location, the number of air-stations and their locations, and the total length of hose needed, as well as estimations on pumpage per day and turnovers of water per day based on the suggested setup.



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